Amendment dated: November 24, 2003 Reply to Office Action of June 23, 2003

This listing of claims will replace all prior versions and listings of claims in this application:

## a.) Listing of Claims

1. (Currently Amended) An optical arrangement for selection and detection of the light of a spectral region of a light beam comprising:

means for spectral dispersion of the light beam thereby defining a the spectrally dispersed light beam in a detection beam path;

means for selecting a definable spectral region of the spectrally dispersed light beam; and

a moveable single detection apparatus disposed in the detection beam path; and

a moveable optical component arranged in the light beam, wherein the means for spectral dispersion of the light beam optical component and the single detection apparatus are arranged to change their a position relative to one another.

- (Currently Amended) The arrangement as defined in Claim 1, wherein the
  moveable optical component is a mirror rotatable about a rotation axis. change of
  the relative position between the spectrally dispersed light beam and the detection
  apparatus brings about a change in the initial and/or final wavelength of the
  spectrally selected region.
- 3. (Currently Amended) The arrangement as defined in Claim 1, wherein the <u>change</u> of the position between the moveable optical component and the <u>single</u> detection apparatus <u>relative to one another at least one optical component is arranged in the path light beam and the relative position change between the spectrally dispersed light beam and the detection apparatus is accomplished by <u>a rotation rotating</u> of the</u>

Amendment dated: November 24, 2003 Reply to Office Action of June 23, 2003

optical component and for a shifting of the single detection apparatus one optical component.

- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Currently Amended) The arrangement as defined in Claim 30 1, wherein the shift relative motion of the single detection apparatus proceeds in along a straight line or on a curve.
- 7. (Currently Amended) The arrangement as defined in Claim 1, wherein the means for spectral dispersion consists comprises essentially of a prism, a reflection grating or and a transmission grating.
- 8. (Currently Amended) A confocal scanning microscope comprising:
  a laser light source generating a light beam, which defines defining an illumination beam path;

a detection beam path defined by the light beam propagating from a specimen arranged with respect to a microscope optical system which defines together with the light from the specimen a detection beam path;

means for spectral dispersion of the light beam in the detection beam path, means for selecting a definable spectral region of the light beam, and a moveable single detection apparatus in the detection beam path; and a moveable optical component arranged in the detection beam path, wherein the optical component and the single detection apparatus are arranged to change their position relative to one another in order to influence the detected spectral region of the light in a spectrally dispersed portion of the light in the detection light beam path and the detection apparatus change their position relative to one another.

9. (Cancelled)

Amendment dated: November 24, 2003 Reply to Office Action of June 23, 2003

- 10. (Currently Amended) The confocal scanning microscope as defined in [one of]

  Claims 8, wherein the moveable optical component at least one mirror is arranged in the detection beam path is a mirror, which is rotatable about a rotation axis and the relative position change between the spectrally dispersed light beam and the detection apparatus is accomplished by rotating and/or shifting the mirror.
- 11. (Original) The confocal scanning microscope as defined in Claim 10, wherein the mirror is arranged before the means for spectral dispersion.
- 12. (Currently Amended) An confocal scanning microscope comprising:

  a laser light source generating a light beam, which defines a an illumination beam path;

a detection beam path;

means for spectral dispersion of the light beam in the detection beam path, means for selecting a definable spectral region of the light beam in the detection beam path; and

a moveable single detection apparatus; and

an optical component arranged in the detection beam path, wherein in order to select the definable spectral region, the spectrally dispersed light beam optical component and the detection apparatus change their position relative to one another.

- 13. (Currently Amended) The confocal scanning microscope as defined in Claim 12, wherein the optical component is a mirror, wherein the mirror is rotatable about a rotation axis. relative position change between the spectrally dispersed light beam and the detection apparatus brings about a change in the initial and/or final wavelength of the spectrally selected region.
- 14. (Currently Amended) The confocal scanning microscope as defined in one of Claims 12, wherein the change of the position between the optical component and the detection apparatus relative to one another at least one optical component

Amendment dated: November 24, 2003

Reply to Office Action of June 23, 2003

arranged in the detection beam path and the relative position change between the spectrally dispersed light beam and the detection apparatus is accomplished by a rotation rotating of the optical component and for a shifting of the detection apparatus one singe optical component.

- 15. (Cancelled)
- (Currently Amended) The confocal scanning microscope as defined in Claim 32, wherein a galvanometer is used to accomplished rotation of the means for spectral dispersion optical component.
- (Currently Amended) The confocal scanning microscope as defined in Claim 16, wherein the optical component to be rotated is coupled directly to the galvanometer and mounted on the latter's mechanical rotation axis.
- 18. (Currently Amended) The confocal scanning microscope as defined in Claim 32, wherein the rotation is accomplished by the use of piezoelements.
- 19. (Cancelled)
- 20. (Currently Amended) The confocal scanning microscope as defined in Claim 12, wherein the change in relative position motion of the detection apparatus proceeds in along a straight line or on a curve.
- 21. (Cancelled)
- 22. (Currently Amended) The confocal scanning microscope as defined in Claim 12, wherein the means for spectral dispersion consists essentially of a prism, a reflection grating, or and a transmission grating.

Amendment dated: November 24, 2003 Reply to Office Action of June 23, 2003

23. (Currently Amended) The confocal scanning microscope as defined in Claim 12, wherein the relative position change between the spectrally dispersed light beam optical component and the detection apparatus is synchronized with the scanning operation of the confocal scanning microscope.

- 24. (Original) The confocal scanning microscope as defined in Claim 23, wherein a specimen segment is scanned repeatedly with the confocal scanning microscope, at different spectral detection settings each time, until the entire spectral region to be detected has been detected, before a subsequent specimen segment is scanned.
- 25. (Original) The confocal scanning microscope as defined in Claim 24, wherein the specimen segment consists essentially of a point, a line, a straight line, an area or a three-dimensional region.
- 26. (Currently Amended) The confocal scanning microscope as defined in Claim 23, wherein synchronization also comprises selection of the <u>a</u> light wavelength to be coupled into the confocal scanning microscope.
- 27. (Currently Amended) The confocal scanning microscope as defined in Claim 26, wherein selection of the <u>light</u> wavelength to be coupled in is accomplished with an acoustooptical component, for example an acoustooptical tunable filter (AOTF) or acoustooptical beam splitter (AOBS).
- 28. (New) The arrangement as defined in Claim 1, wherein the optical component is arranged before the means for spectral dispersion.
- 29. (New) The arrangement as defined in Claim 1, wherein the change of a position between the optical component and the detection apparatus relative to one another is accomplished by a rotation of the optical component.

Application No.: 09/682,187 Amendment dated: November 24, 2003 Reply to Office Action of June 23, 2003

30. (New) The arrangement as defined in Claim 1, wherein the change of the position between the optical component and the detection apparatus relative to one another is accomplished by a shift of the detection apparatus.

- 31. (New) The arrangement as defined in Claim 12, wherein the optical component is arranged before the means for spectral dispersion.
- 32. (New) The confocal scanning microscope as defined in Claim 12, wherein the change of the position between the optical component and the detection apparatus relative to one another is accomplished by a rotation of the optical component.

Application No.: 09/682,187 Amendment dated: November 24, 2003 Reply to Office Action of June 23, 2003

b.) Amendments to Drawings:
Fig. 1 is submitted with corrections made in accordance with the Examiner's objections and new Fig. 2 is also submitted. Care has been exercised not to introduce new matter.